

# Work Order ID 48589A

July 1, 2009 8:23:22 AM



Page 1

Item ID: D3821-3KIV

Accept



Setup Start



Revision ID: B

Stop



Item Name: Panel w/ Rotor Brake-Ivory

Start Date: 07/15/2009 Start Qty: 2.00



Cust Item ID:

Required Date: 08/03/2009 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

100

0.00



HandThermo

Memo

0.00

Hand Finishing Thermoforming

1-Cut Sheet to required Blank size

M109708 BB X2

09/07/01

X2

110

0.00



Thermoform

Memo

0.00

Thermoforming Machine

1-Machine Set-Up

2-Pre-heat Tool to required temp.

3-Thermoform as per Dwg and Folio #FTA024 using tool DT9054

Dwg Rev: B

Folio Rev: A

BB 09/07/01 X2 PTO  
1 SCRAP. →

Part DRENISHED Humidity in SHEET Dry SHEET

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3821-3K1V PAR #: N/A Fault Category: Thru NCR: (Yes) No DQA: AS Date: 09.07.10  
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: AS Date: 08.08.17

NCR: 48589A		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
9/2/11	#110	Part blemished Qty 40 R.C.: too much humidity in the sheet.	<u>GS1112</u>	SCRAP AND DESTROY AND Replace M4 109703	<u>BB</u> 09/07/01	<u>BB</u> 09-07-09	<u>GS1112</u>	<u>S</u> 09/07/08

NOTE: Date & initial all entries

# Work Order ID 48589A

July 1, 2009 8:23:22 AM



Page 2

Item ID: D3821-3KIV

Accept



Setup Start



Revision ID: B

Stop



Item Name: Panel w/ Rotor Brake-Ivory

Start Date: 07/15/2009 Start Qty: 2.00



Cust Item ID:

Required Date: 08/03/2009 Req'd Qty: 2.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

120

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

1-Visually inspect for proper formation and texture

BB 09/07/07 X2

130

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

DH 09/07/07 X2

140

0.00



HandThermo

Memo

0.00

Hand Finishing Thermoforming

1-Trim to finished dimensions as per Dwg

BB 09/07/08 X2

# Work Order ID 48589A



Page 3

July 1, 2009 8:23:22 AM

Item ID: D3821-3KIV

Accept



Setup Start



Revision ID: B

Stop



Item Name: Panel w/ Rotor Brake-Ivory

Start Date: 07/15/2009 Start Qty: 2.00



Cust Item ID:

Required Date: 08/03/2009 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

150

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

1-Complete FAI document

BB 09/07/08 (X2)

160

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

=> 5 09/07/08 (X2)

170

Identify as per dwg & Stock Location: \_\_\_\_\_

0.00



Packaging

Memo

0.00

Packaging

9/7/9 (2v) sp

**Work Order ID 48589A**

Page 4

July 1, 2009 8:23:22 AM

Item ID: D3821-3KIV

Accept



Setup Start



Revision ID: B

Stop



Item Name: Panel w/ Rotor Brake-Ivory

Start Date: 07/15/2009 Start Qty: 2.00



Cust Item ID:

Required Date: 08/03/2009 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

09/07/09

W 07.02.09

# Picklist Print

July 1, 2009 8:23:21 AM

Work Order ID: 48589A

Parent Item: D3821-3KIVRevB

Parent Item Name: Panel w/ Rotor Brake-Ivory

Comments:

Start Date: 07/15/2009

Required Date: 08/03/2009

Start Qty: 2.00

Required Qty: 2.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
✓ MKYD6185S.080-P3- 62015		Purchased	No			100	sf	1,029.030	25.7224	✓		



6185 KYDEX .080"



Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

MAT

1029.03

109703

1029.03

BB

09/07/08

M 109703

Date: Thursday, 18/06/2009 10:00:49 AM  
 User: Linda Lacelle

## Process Sheet

<b>Customer</b> : CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> : PANEL-W/ ROTOR BRAKE, IVORY
<b>Job Number</b> : 48589A	
<b>Estimate Number</b> : 13584	
<b>P.O. Number</b> :	<b>Part Number</b> : D38213KIV
<b>This Issue</b> : 18/06/2009 <b>S.O. No.</b> :	<b>Drawing Number</b> : D38213
<b>Prsht Rev.</b> : NC	<b>Project Number</b> :
<b>First Issue</b> : 15/06/2009 <b>Type</b> : THERMOFORMING	<b>Drawing Revision</b> : <i>AB DL</i>
<b>Previous Run</b> : 47331A	<b>Material</b> : MKYD6185S080P362015
<b>Written By</b> :	<b>Due Date</b> : 22/06/2009 <b>Qty:</b> 2 <b>Um:</b> EACH
<b>Checked &amp; Approved By</b> :	
<b>Comment</b> : Est. A New Issue 08/09/17 DL	
Est B Add Colour Code 09/06/02 DL	

## Additional Product

Job Number:



<b>Seq. #:</b>	<b>Machine Or Operation:</b>	<b>Description :</b>
----------------	------------------------------	----------------------

1.0	MKYD6185S080P362015	6185 KYDEX .080"
-----	---------------------	------------------



**Comment:** Qty.: 12.7969 sf(s)/Unit Total : 25.5938 sf(s)  
 6185 Kydex .080" Ivory

*M107703*

2.0	HAND FINISH TH	HAND FINISHING THERMOFORMING
-----	----------------	------------------------------

**Comment:** HAND FINISHING THERMOFORMING

1) Machine set up

*BB 09/07/01*

3.0	HAND FINISH TH	HAND FINISHING THERMOFORMING
-----	----------------	------------------------------

**Comment:** HAND FINISHING THERMOFORMING

1) Cut sheet to required blank size

*BB 09/07/01 (A2)*

4.0	THERMOFORMING	THERMOFORMING MACHINE
-----	---------------	-----------------------

**Comment:** THERMOFORMING MACHINE

Thermoform as per Dwg. D3821-3 and folio FTA 024 using tool DT 9054

Dwg. Rev. \_\_\_\_\_

Folio Rev. \_\_\_\_\_

*BB 09/07/01 (A2) 1 SCRAP.*



Date: Thursday, 18/06/2009 10:00:49 AM  
User: Linda Lacelle

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: PANEL--W/ ROTOR BRAKE, IVORY

Job Number: 48589A

Part Number: D38213KIV

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

Visually inspect for proper formation of each part

BB 09/07/08 X2

6.0

QC8

SECOND CHECK



Comment: SECOND CHECK

Wh 09/07/08 X2

7.0

HAND FINISH TH

HAND FINISHING THERMOFORMING



Comment: HAND FINISHING THERMOFORMING

1) Trim to Finished Dimensions

BB 09/07/08 X2

8.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

Check dimensions to ensure conformity to drawing tolerances.

BB 09/07/08 X2

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 09/07/08 X2

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: \_\_\_\_\_

11.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion:



DART AEROSPACE LTD		Work Order: 48589A
Description: Rotor Blade - Ivory	Part Number: D3821-3 KIV	
Inspection Dwg: <del>3821</del>	Rev: <del>A</del> B	Page 1 of 1

3821  
D3821

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

### THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than "	✓			
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured by: JB

Date: 09/07/08

### TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
.75	.78	.78	✓			
1.0		1.1	✓			
.63	Min	.84	✓			
.25	Min	.31	✓			
.375	Min	.404	✓			
.020	.017	.047	✓			
.050		.067	✓			

Measured by: JB

Date: 09/07/08

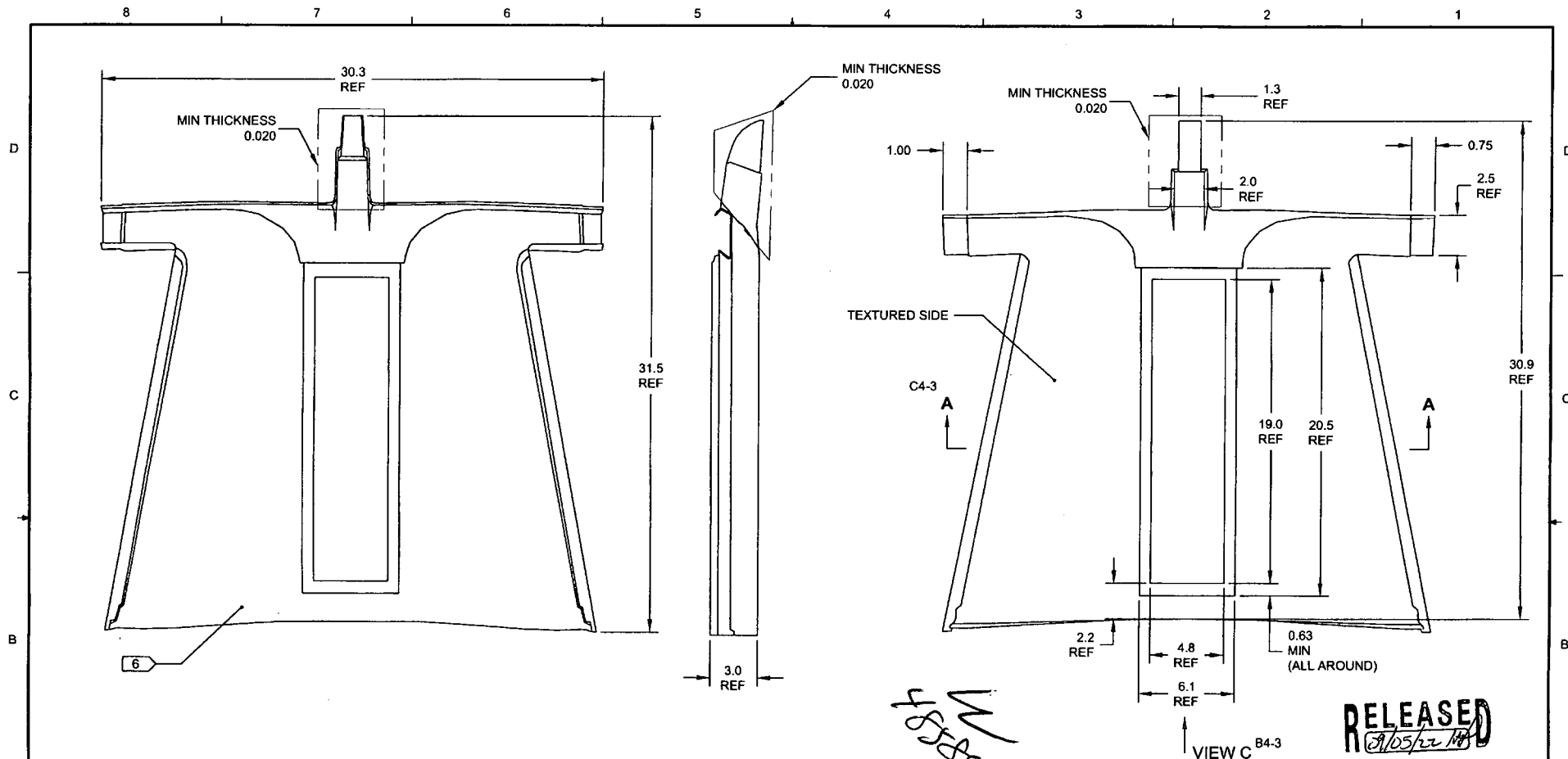
Audited by: E

Date: 09/07/08

Prototype Approval: d/a

Date:

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/DL	



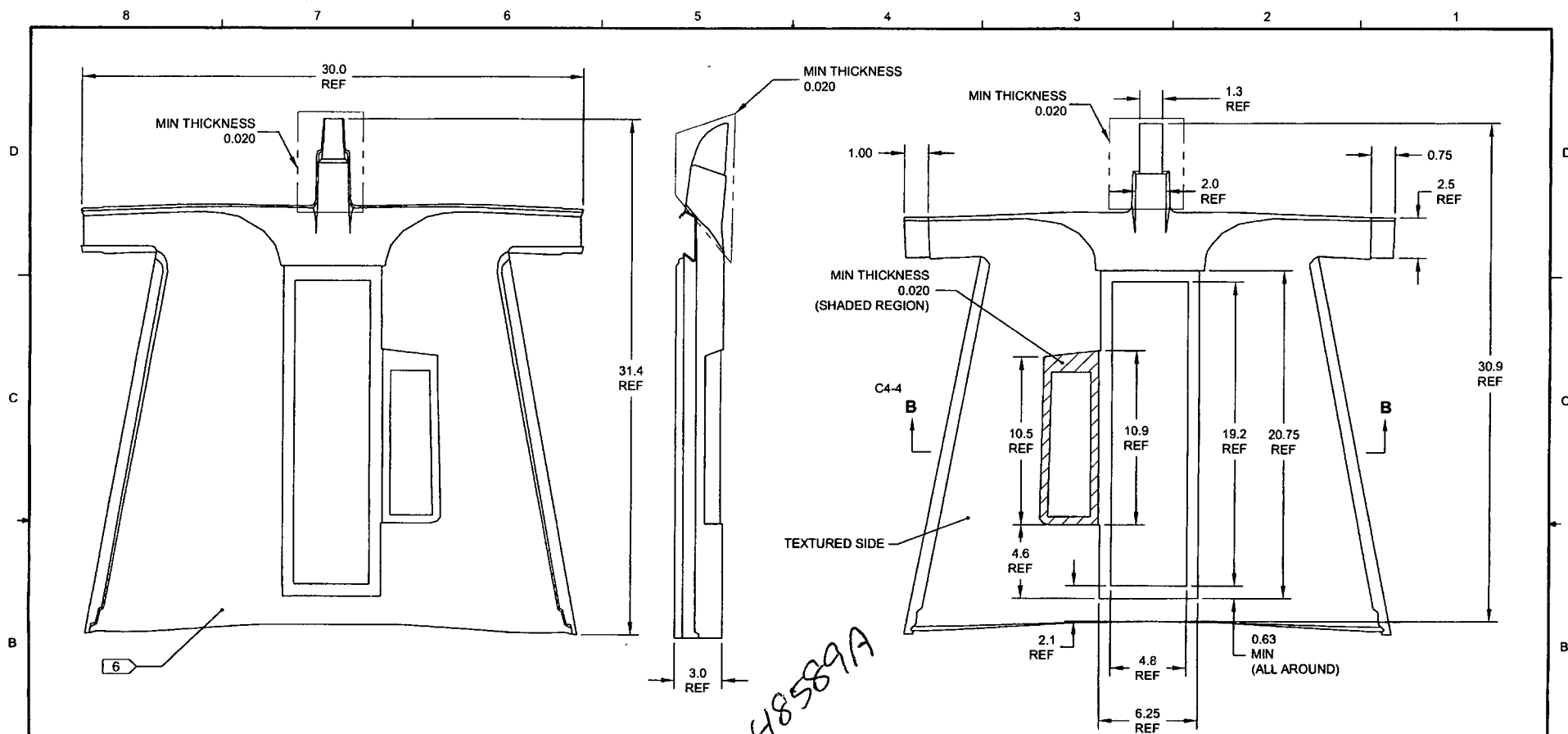
**D3821-1 PANEL, WITHOUT ROTOR BRAKE**  
(BELL 206 A/B)

**NOTES:**

- 1) MATERIAL: SEE TABLE
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N (SEE TABLE) USING VIBRATING STYLUS
- 7) WEIGHT: 2.2 lbs
- 8) TOOLING: THERMOFORM PER MOLD DT9053 PER DART QSI 022. TRIM PER MOLD
- 9) MINIMUM THICKNESS: 0.050" UNLESS OTHERWISE NOTED

PART NUMBER	DESCRIPTION
D3821-1KIV	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, IVORY #62015 (MKYD6185S.080-P3-62015)
D3821-1KGY	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, STEEL GRAY #52068 (MKYD6185S.080-P3-52068)

B	ADD STEEL GRAY COLOUR OPTION, ADD IVORY P/N'S D3821-1KIV, D3821-3KIV AND ADD STEEL GRAY P/N'S D3821-1KGY, D3821-3KGY (ZN A5-1, A5-2)	PH	09.05.05
A	NEW ISSUE	PH	08.09.29
REV.	DESCRIPTION	BY	DATE
DESIGN	W8814	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3821 TITLE PANEL (BELL 206 A/B) SCALE NTS COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DRAWN	W8814		
CHECKED	W8814		
MFG. APPR.	W8814		
APPROVED	W8814		
DE APPR.	W8814		
DATE	09.05.05	REV. B SHEET 1 OF 4	



**D3821-3 PANEL, WITH ROTOR BRAKE**  
(BELL 206 A/B)

**RELEASED**  
07/05/22 MP

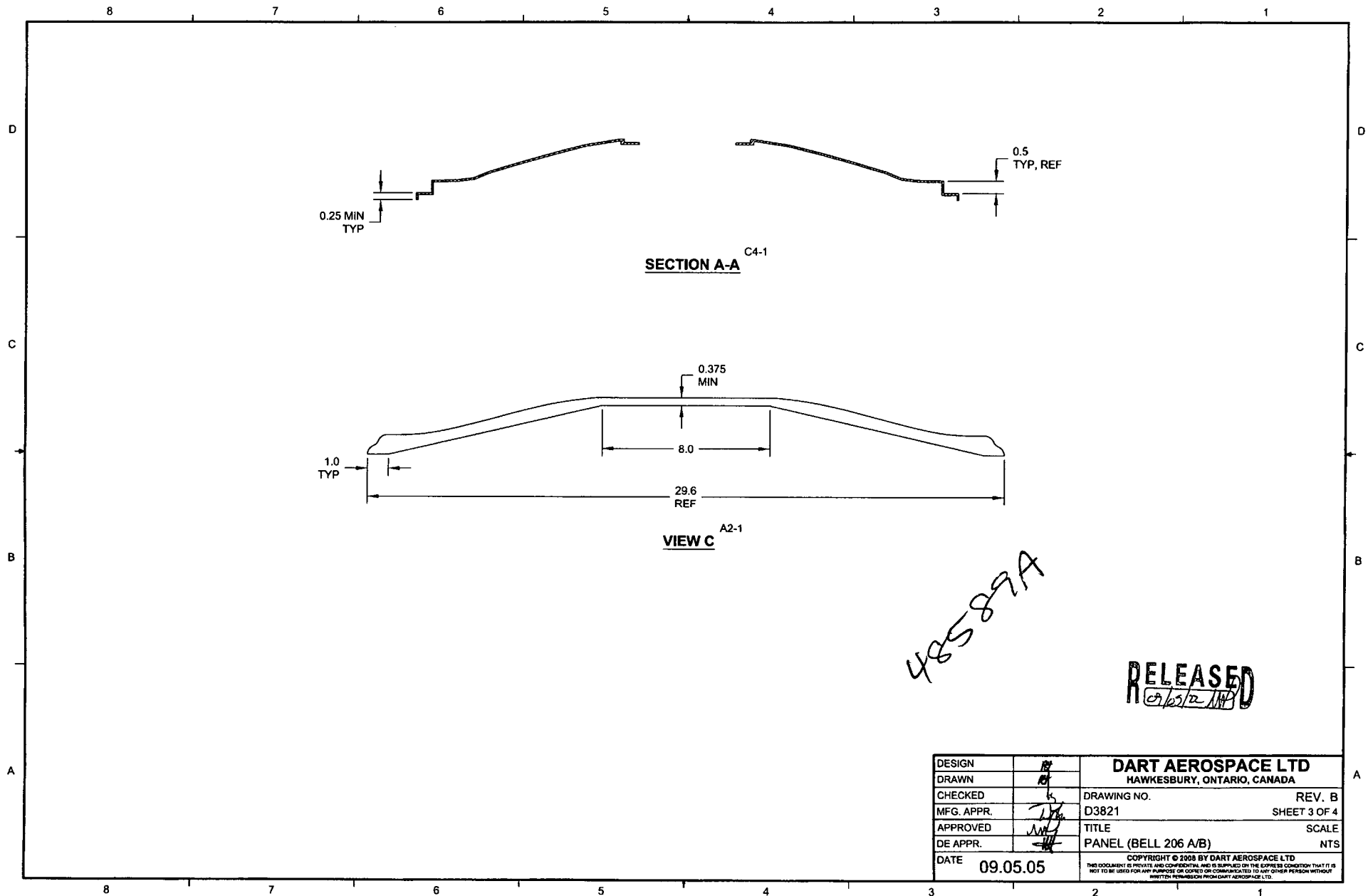
**NOTES:**

- 1) MATERIAL: SEE TABLE
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N (SEE TABLE) USING VIBRATING STYLUS
- 7) WEIGHT: 2.2 lbs
- 8) TOOLING: THERMOFORM PER MOLD DT9054 PER DART QSI 022. TRIM PER MOLD
- 9) MINIMUM THICKNESS: 0.050" UNLESS OTHERWISE NOTED

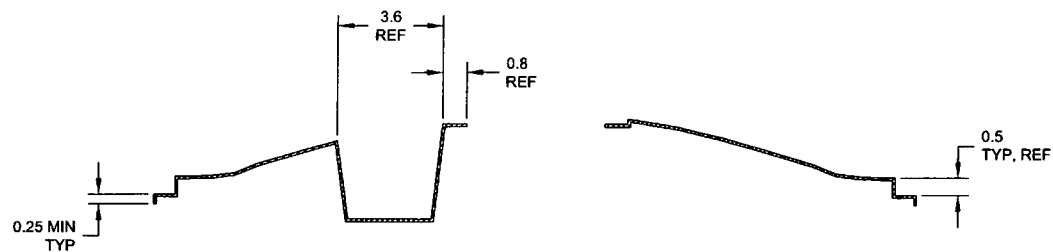


PART NUMBER	DESCRIPTION
D3821-3KIV	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, IVORY #62015 (MKYD6185S.080-P3-62015)
D3821-3KGY	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, STEEL GRAY #52068 (MKYD6185S.080-P3-52068)

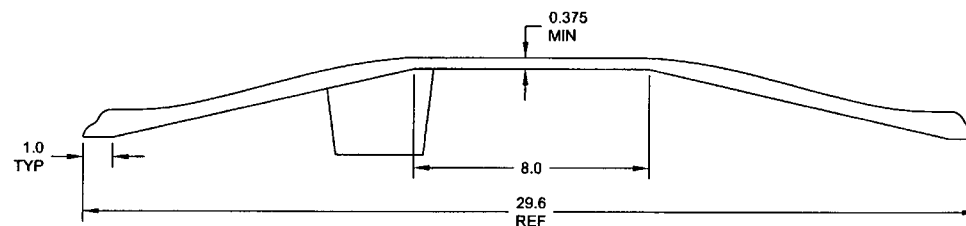
DESIGN		<b>DART AEROSPACE LTD</b>
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. REV. B
MFG. APPR.		D3821 SHEET 2 OF 4
APPROVED		TITLE SCALE
DE APPR.		PANEL (BELL 206 A/B) NTS
DATE	09.05.05	COPYRIGHT © 2005 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		



DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3821	SHEET 3 OF 4
APPROVED		TITLE	SCALE
DE APPR.		PANEL (BELL 206 A/B)	NTS
DATE	09.05.05	<small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	



**SECTION B-B** C4-2



**VIEW D** C4-2

48589A

**RELEASED**  
09/05/22 JAV

DESIGN	RA	<b>DART AEROSPACE LTD</b>	
DRAWN	RA	HAWKESBURY, ONTARIO, CANADA	
CHECKED	RA	DRAWING NO.	REV. B
MFG. APPR.	RA	D3821	SHEET 4 OF 4
APPROVED	RA	TITLE	SCALE
DE APPR.	RA	PANEL (BELL 206 A/B)	NTS
DATE	09.05.05	<small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	